

Sheet: Sheet – Input Connector

SCL1

SDA1

RX\_MD

TX\_M

DTR

OCP\_TRIG

File: InputConnector.sch

Sheet: MCU

SCL1

SDA1

RX\_M

TX\_M

DTR

OCP\_TRIG

File: Sheet-MCU.sch

Sheet: PowerFets

I\_OUT

CHRG\_ON

GATE\_LOAD

VOUT

VIN

File: Sheet – Power FETS.sch

Sheet: Sheet – Power

VIN

VOUT

File: Power.sch

DATE:	REVISION:	CREATED BY:	DESCRIPTION:	REVISION CODE:
2019/09/09	A0	STEVEN GUZMAN	INITIAL RELEASE DESIGN	20190909_PROJECTS_OCP_OVP_A0_00001
2019/11/19	A1	STEVEN GUZMAN	1. Added ADS1114 for voltage rail reading 2. Changed R204 from 3.09M to 1.4M 3. Added TVS diode D301 DESD34VS2S0-7	20191119_PROJECTS_OCP_OVP_A1_00002
2020/07/18	A2	STEVEN GUZMAN	1. REPLACED ADS1114 WITH ADS1119 2. REMOVED 1.25V REFERENCE IC 3. ADDED R202 AND R203 FOR CURRENT SENSE 4. REPLACED ACS781 WITH ACS780 5. SWITCHED VOLTAGE RAIL TO 5V 6. ADDED 16MHz OSCILLATOR Y201 7. REPLACED R501 33.1k WITH 88.7k	20200718_PROJECTS_OCP_OVP_A2_00003
2020/10/17	A3	STEVEN GUZMAN	1. ADDED D501, D502 2. REMOVED DIFFERENTIAL MEASUREMENT 3. CHANGED R205 AND R204 4. ADDED R208, R209 5. CHANGED L501 6. CHANGED C504, C505 7. ADDED L301 8. REMOVED R403	20201017_PROJECTS_OCP_OVP_A3_00004
	A4	STEVEN GUZMAN	1. REMOVED F401-F403 2. ADDED F401 125A 3. UPDATED P405,P407 TO 12MM PAD	20210213_PROJECTS_OCP_OVP_A4_00005

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Sheet: /

File: 20190720\_Project\_OCP-OVP-UVP.sch

Title: the Protection Board – Root Page

Size: B

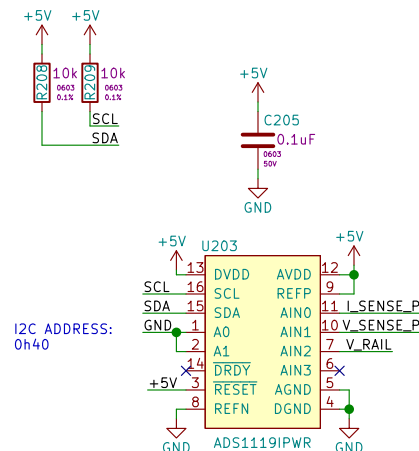
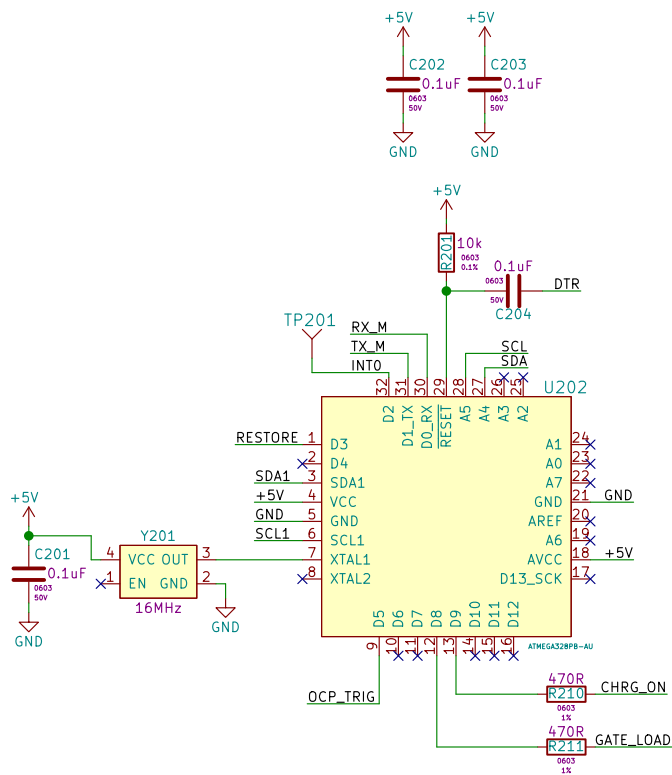
Date: 2021-07-02

Rev: A5

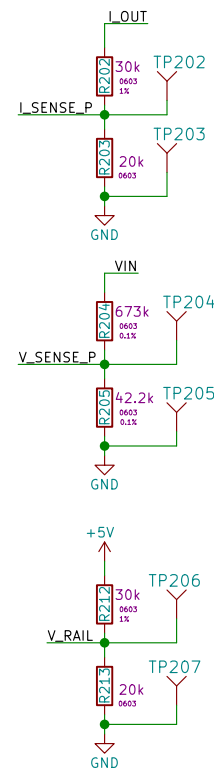
KiCad E.D.A. kicad (5.1.9)-1

Id: 1/5

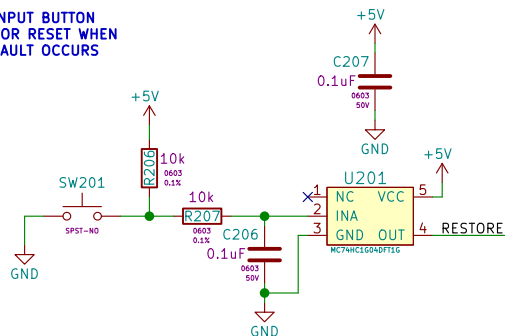
RX\_M RX\_M  
 TX\_M TX\_M  
 DTR DTR  
 SDA1 SDA1  
 SCL1 SCL1  
 OCP\_TRIG OCP\_TRIG



I\_OUT I\_OUT  
 VIN VIN  
 GATE\_LOAD GATE\_LOAD  
 CHRG\_ON CHRG\_ON



INPUT BUTTON FOR RESET WHEN FAULT OCCURS



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Sheet: /MCU/

File: Sheet-MCU.sch

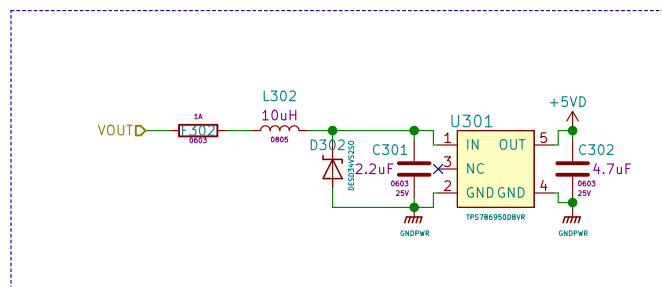
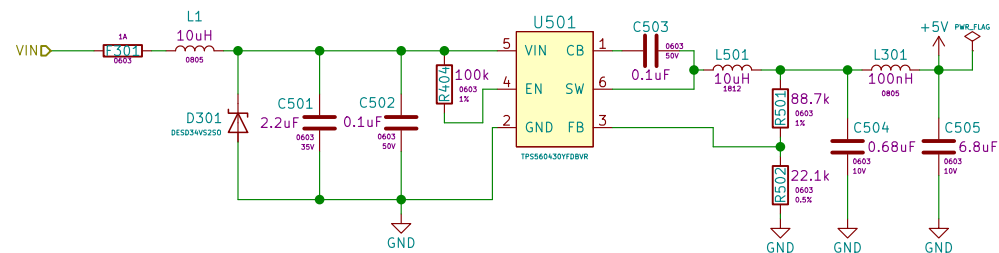
**Title: the Protection Board – the Brains**

Size: A Date: 2021-07-02

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Rev: A5

Id: 2/5



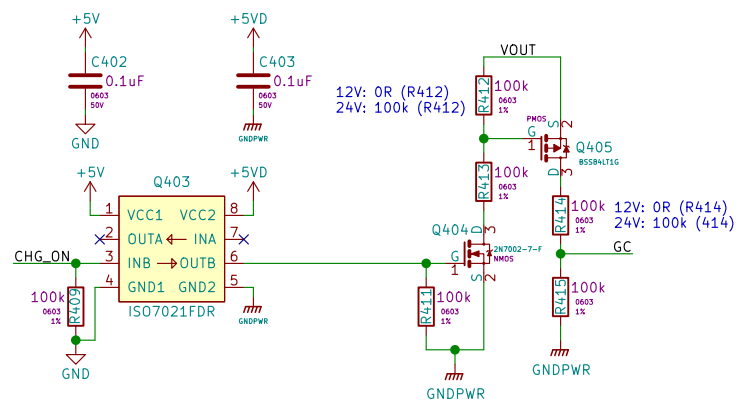
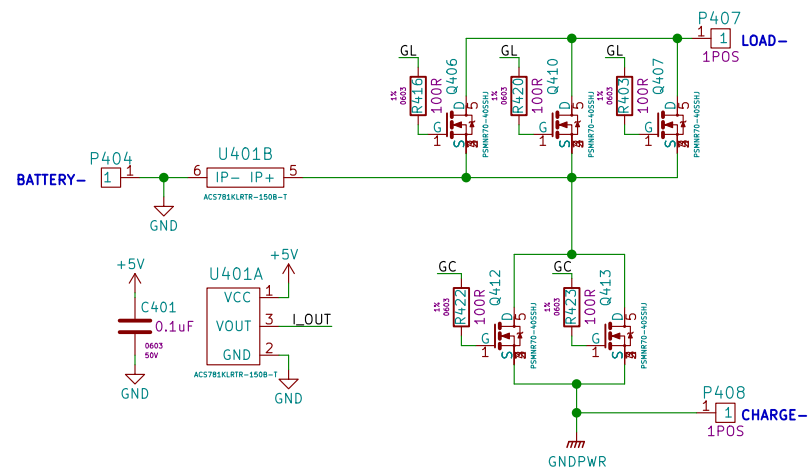
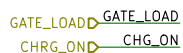
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Sheet: /Sheet - Power/  
File: Power.sch

**Title: the Protection Board - the Power**

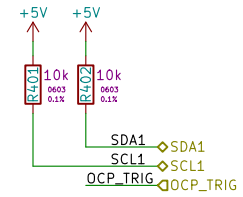
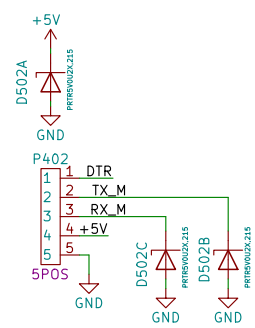
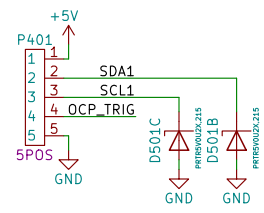
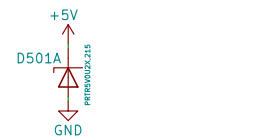
Size: A Date: 2021-07-02  
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Rev: A5  
Id: 3/5



**Title: the Protection Board – the Current Control**

Id: 4/5



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Sheet: /Sheet - Input Connector/ File: InputConnector.sch		
Title: the Protection Board - the Input Connection		
Size: A	Date: 2021-07-02	Rev: A5
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